# Rear View Camera GP-RV201

# Operating Instructions



# Panasonic.

Before attempting to connect or operate this product, please read these instructions completely.



#### CAUTION

RISK OF ELECTRIC SHOCK DO NOT DPEN



#### CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER SER-VICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



SA 1966

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The serial number of thi	s product ma	y be found on
the hottom of the unit.		

You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No	 	
Serial No.		

# **CONTENTS**

PREFACEPrefaction of the control of the contr	2
FEATURES	2
PRECAUTION :	З
MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS	4
INSTALLATION	6
VIEW RANGE	
SYSTEM CONNECTION	
TECHNICAL DATA	12
SPECIFICATIONS	
STANDARD ACCESSORY	14
OPTIONAL ACCESSORIES	14

#### PREFACE

Panasonic's Rear View Camera, GP-RV201, significantly reduces dangerous blind spots. This rear view camera has been developed exclusively for large trucks, buses and other commercial vehicles.

#### **FEATURES**

- 1. 1/3" Interline Transfer CCD Image Sensor with 512
   (H) × 492 (V) pixels.
- 2. 380 lines of horizontal resolution.
- 3. 0.05 footcandles (0.5 lux) of minimum illumination at F1.4.
- 4. 46dB of signal to noise ratio.

- Wide field of view by newly developed wide angle lens f=2.2mm, F1.4.
- 6. High resistance to shocks and vibration.
- Single coaxial cable connection enables easy installation

#### **PRECAUTION**

Do not attempt to disassemble the camera.
 To prevent electric shock, do not remove screws or cover.

There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

Handle the camera with care.

Do not abuse the camera. Avoid striking or shaking it.

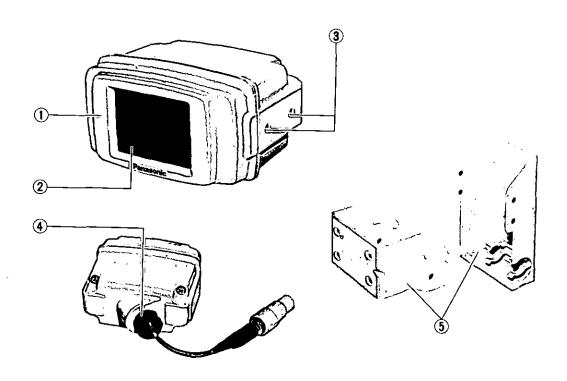
The camera could be damaged by improper handling or storage.

 Keep the face of the camera lens glass clean.
 Whenever cleaning the camera body, clean the lens glass of the camera by using a soft dry cloth. In case the dirt is hard to wipe off, use a mild detergent and wipe gently. Pay attention to obstacles located at the same height as the rear view camera since they are out of view of the rear view camera.

Do not operate the camera beyond its temperature range.

Do not use the camera in an extreme environment where high temperature or high humidity exist. Use the camera under conditions where temperatures are within  $-22^{\circ}F - 140^{\circ}F$  ( $-30^{\circ}C - +60^{\circ}C$ ).

# MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



#### 1 Camera Unit

The 1/3" CCD B/W camera is inside Caution

Even though the camera unit is installed in the water-proof housing, do not spray a water jet directly at the camera unit for cleaning purposes

#### 2 Lens

The auto iris wide angle lens is installed The focal length is 22mm

#### Note

Keep the lens glass always clean

#### 3 Camera Angle Adjusting Screws

These 4 screws are used to secure the camera unit By changing the fixing position of these screws, the vertical field of view angle of the camera can be changed approx 70°

#### 4 Camera Cable Connector

This connector is a drip-proof type connector and is used to connect the optional camera cable GP-CA40 (33ft/10m) or GP-CA41 (66ft/20m)

#### Caution

Whenever disconnecting the camera cable from this connector for maintenance, turn the vehicle's ignition switch to the LOCK position to turn off the power

#### 5 Bracket

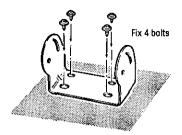
This bracket is used to secure the camera onto the vehicle

#### INSTALLATION

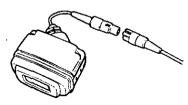
- Mounting the camera onto the top of the roof of the vehicle.
  - Remove 4 Camera Angle Adjusting Screws and remove the Camera Unit from the Bracket.



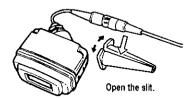
Secure the Bracket into the top of the roof by using 4 bolts (obtained locally (6 mm/diameter bolt)).



3. Connect the Optional Camera Cable to the Camera Cable Connector (4).



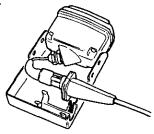
 Open the slit on the Connector Cover, and cover the optional Camera Cable and Camera Cable Connector.



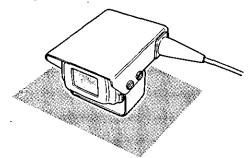
#### Note:

Set the Connector Cover so that the slit is in the up position.

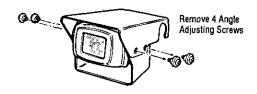
Install the Connector Cover into the chassis of the Bracket.



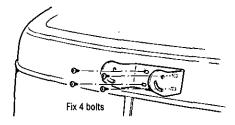
Adjust the camera to the desired angle and fix the Camera Unit into the Bracket using 4 Camera Angle Adjusting Screws.



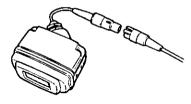
- Mounting the camera onto the top of the rear panel of the vehicle.
- Remove 4 Camera Angle Adjusting Screws and remove the Camera Unit from the Bracket.



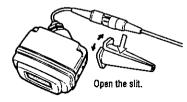
Secure the Bracket on the top of the rear panel of the vehicle by using 4 bolts (obtained locally (6 mm/diameter bolt)).



3. Connect the Optional Camera Cable to the Camera Cable Connector (4).



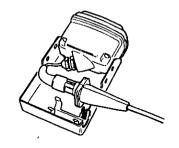
 Open the slit on the Connector Cover, and cover the optional Camera Cable and Camera Cable Connector.



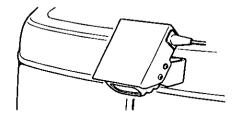
#### Note:

Set the Connector Cover so that the slit is in the up position.

Install the Connector Cover into the chassis of the Bracket.

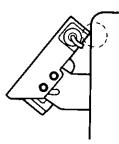


Fix the Camera Unit into the Bracket using 4 Camera Angle Adjusting Screws.



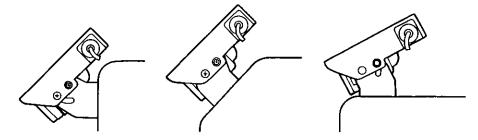
#### Note

When using this camera with the following angle, adjust the camera angle not to touch to the vehicle

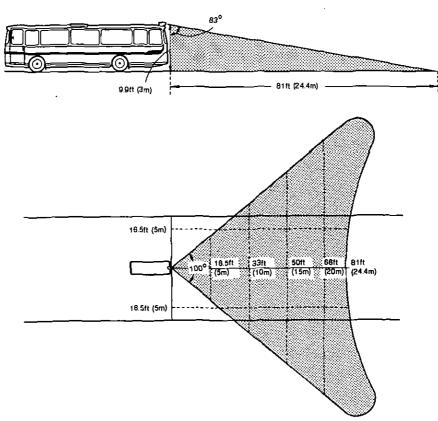


### Angle Adjustment

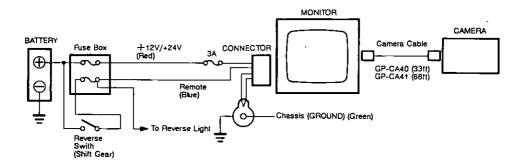
Change the direction of camera as follows

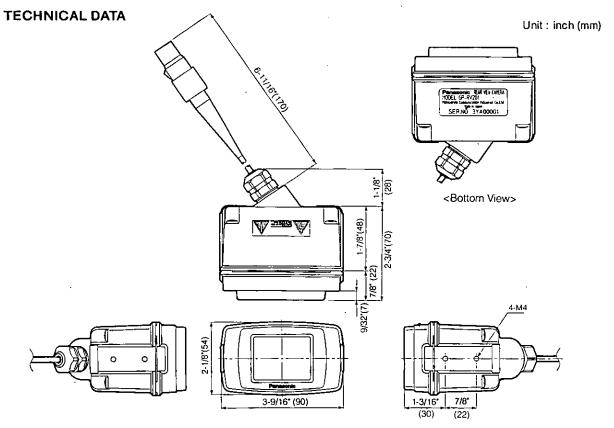


# **VIEW RANGE**



### SYSTEM CONNECTION





#### **SPECIFICATIONS**

Power Source : Supplied from specified monitor GP-RV202/GP-RV112,

Approx. DC12V, 200mA

Pick-up Device: 1/3" Interline Transfer CCD with 512 (H) × 492 (V) pixels

Scanning System: 2:1 Interlace

Scanning: 525 lines/60 fields/30 frames

Horizontal: 15.734KHz, Vertical: 59.94Hz

Synchronization: Internal Horizontal Resolution: 380 lines

Video Output: 1.0Vp-p, 75ohms

Signal to Noise Ratio: 46dB

Minimum Illumination: 0.05 footcandle (0.5 lux) at F1.4, AGC ON

Lens: F1.4, f=2.2mm, Auto tris Control Lens

Angular Field of View:  $100^{\circ}$  (H)  $\times$  83° (V) Vibration Resistance: 4.4G (10Hz - 100Hz)

Ambient Operating Temperature :  $-22^{\circ}F - 140^{\circ}F (-30^{\circ}C - +60^{\circ}C)$ Dimensions :  $3-9/16'' (W) \times 2-1/8'' (H) \times 2-3/4'' (D)$ 

(Excluding Cover and Bracket) 90 (W) × 54 (H) × 70 (D) mm

Weight (Excluding Cover and Bracket): 0.93 lbs. (0.42Kg)

Weight and Dimensions indicated are approximate. Specifications are subject to change without notice.

#### STANDARD ACCESSORY

Connector Cover 1pc

#### **OPTIONAL ACCESSORIES**

Monitor GP-RV202 Driver's Monitor GP-RV112 Camera Cable GP-CA40 (33ft/10m) Camera Cable GP-CA41 (66ft/20m)



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